



UNITED STATES ENVIRONMENTAL PROTECTION AGENCY REGION 8

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Ref: 8EPR-SA

<u>ACTION MEMORANDUM</u>

SUBJECT: Approval and Funding for a Time Critical Removal Action at the Empire State

Oil Company Refinery Site, Thermopolis, Hot Springs County, Wyoming

FROM: Joyce Ackerman, On-Scene Coordinator

Response Unit

THRU: Laura Williams, Chief

Response Unit

TO: David A. Ostrander, Director

Emergency Response and Preparedness Program

Site I.D. #: 08D5

I. PURPOSE

The purpose of this Action Memorandum is to request and document approval of the Removal Action described herein for the Empire State Oil Company Refinery Site (Site), located at 242 Amoretti Street in Thermopolis, Hot Springs County, Wyoming, 82443. A Site map is shown in Attachment 1.

This Removal Action addresses the need to mitigate the threat to the local population and the environment posed by chrysotile and amosite asbestos contamination at the Site. The EPA's investigation indicates the asbestos was released to the environment from demolition of a refinery.

The Removal Action will require less than 12 months and \$2 million to complete. This Removal Action is considered nationally significant or precedent-setting because it involves asbestos as the principal contaminant of concern.

II. SITE CONDITIONS AND BACKGROUND

Site Name: Empire State Oil Company Refinery Site Category of Removal: Time-Critical Removal Action

Superfund Site ID (SSID): 08D5

NRC Case Number: NA

CERCLIS Number: D980807762

Site Location: Thermopolis, Hot Springs County, Wyoming

Latitude = 43.6399, Longitude = -108.2081

NPL Status: Not an NPL site, not planned for future NPL listing

Removal Start Date: Spring/Summer 2013

A. Site Description

1. Removal Site Evaluation

According to historical environmental assessment reports, the Empire State Oil Company operated an oil refinery at the Site in Thermopolis from 1938 until 1969. The refinery was demolished in 1974, leaving only a few buildings on the north edge of the site and a few scattered piles of building materials.

The Site continues to be mostly vacant, with a few buildings, some vegetation, and scattered piles of debris and backfill. The current property owner, Riverside Management, Inc., reports that they have conducted some debris removal since their purchase of the property in 1995, as well as some tilling, planting, and irrigation of the property.

There are three residential properties immediately adjacent to the Site on the south. Some commercial and industrial businesses are located on the northern part of the Site, including, but not limited to, a rental storage unit business and a concrete plant. The Site encompasses approximately 30 acres.

The EPA and the WYDEQ conducted Preliminary Assessments and Site Inspections (PA/SIs) at the Site in the 1980s and 1990s, although none included sampling for asbestos-containing materials (ACM). In 2011, the EPA conducted a removal site inspection (RSI) at the Site with field sampling and assessment during the weeks of April 25, May 23, and August 1, 2011. The results of the field events are documented in the Sampling Activities Report dated May 19, 2012, written by the EPA's Superfund Technical Assessment and Response Team (START) contractor, URS Operating Services, Inc.

The RSI determined that there was friable asbestos on the ground surface of the Site, including chrysotile and amosite. During the field sampling, the 30-acre Site was divided into 50' by 50' grids. Two teams of EPA START contractors conducted a visual inspection for potential ACM in the accessible building structures and on the ground surface of the Site. Each team included one certified asbestos building inspector. START personnel collected samples of suspect ACM encountered in grids during the ground surface survey. Samples were analyzed by polarized light microscopy (PLM). Analytical results showed that 48 of 57 samples contained asbestos in concentrations greater than 1 percent and 3 additional samples contained asbestos in "trace" concentrations. Friable ACM is defined by

the National Emissions Standards for Hazardous Air Pollutants (NESHAP) for asbestos as any material containing more than one percent asbestos, as determined using the method specified in Appendix A, Subpart F, 40 CFR Part 763, Section 1, PLM, that, when dry, can be crumbled, pulverized or reduced to powder by hand pressure.

Attachment 2 is a map of the grids that contained greater than one percent asbestos and the table in the attachment shows a summary of the sampling results. A total of 46 grids showed the visual presence of ACM, as confirmed by laboratory analysis.

The Site has a low fence on its western boundary but no gate at a western entrance on Shoshoni Street. The wire fence has been pulled down in at least one location, suggesting persons trespass onto the property by climbing over the fence. The Site can also be easily accessed from Amoretti Street on the north. Persons living at or visiting the residences on the south side can easily access the Site. During the RSI, a number of beer bottles were seen in a small clearing on the Site, suggesting that persons are trespassing on the Site even though it is privately owned. Residents and the property owners report that persons use all-terrain vehicles (ATVs) on the Site, and persons walk their dogs across the Site.

2. Physical Location and Characteristics

The Site is in the southeast part of Thermopolis in central Wyoming. Thermopolis has a population of approximately 3,000, and is home to the world's largest mineral hot springs in Hot Springs State Park. The Site is bounded on the east and south by the Big Horn River, on the west by a railroad spur, and on the north by Amoretti Street.

3. Release or threatened release into the environment of a hazardous substance, or pollutant or contaminant

The type of asbestos at this Site has been identified as chrysotile and amosite. Asbestos, including chrysotile and amosite, is a hazardous substance as defined by 101(14) of CERCLA. The EPA's investigation indicates that the bulk ACM on the ground surface of the Site was released in the 1970s during demolition activities to remove tanks, piping, and other structures at the Site. Asbestos is a solid mineral with a variety of forms including chrysotile and amosite. Asbestos is highly resistant to heat and has exceptional tensile strength, both of which are characteristics that lend themselves to use in ordinary building materials. Asbestos tends to become brittle over time, shattering into fiber bundles due to age and weathering, and is referred to as being friable. Subsequently, the friable fiber bundles can further degrade into microscopic fibers that can be distributed into the air. Human exposure to these airborne asbestos fibers via inhalation has been proven to cause asbestosis, cancer, mesothelioma, and other respiratory diseases. There is potential for human exposure to Site-related asbestos in the surrounding

residential areas and to trespassers or other persons who access the poorly-secured Site. Migration of the asbestos has likely already occurred and will continue to occur from weathering and human-caused activities such as foot traffic, vehicle traffic, and other disturbance of debris piles. Photos in Attachment 4 show examples of the deteriorating piles of asbestos at the Site.

4. NPL status

The Site is not on the National Priorities List (NPL).

5. Maps, Pictures and Other Graphic Representations

A map of the Site location is provided in Attachment 1 and photographs of the Site are provided in Attachment 4.

B. Other Actions to Date

1. Previous actions

There have been no previous Removal Actions at this Site.

2. Current actions

There is no current Removal Action at this Site.

C. State and Local Authorities' Roles

The WYDEQ has expressed concern regarding contamination at the Site, including asbestos on the ground surface. Neither the State nor local agencies have the resources to conduct the cleanup independently. The EPA has kept State and local agencies apprised of the sampling events and results.

III. THREATS TO PUBLIC HEALTH OR WELFARE OR THE ENVIRONMENT, AND STATUTORY AND REGULATORY AUTHORITIES

Conditions at this Site present an imminent and substantial threat to human health and the environment, and meet the criteria for initiating a Removal Action under 40 CFR 300.415(b)(2) of the National Oil and Hazardous Substances Pollution Contingency Plan (NCP).

The EPA has considered all the factors described in 40 CFR 300.415(b)(2) of the NCP and determined that the following factors apply at the Site.

(i) <u>Actual or potential exposure to nearby human populations, animals, or the food chain from</u> hazardous substances;

Friable asbestos is present on the ground surface and could easily be disturbed by foot traffic, vehicle traffic such as ATVs, or mechanical farm equipment such as tillers or plows. Disturbance of asbestos can cause fibers to become airborne, creating an inhalation threat to human receptors. The Site is poorly secured and can be accessed from Shoshoni Street, Amoretti Street, the residential homes on the south side of the Site, and by climbing over the low wire fence on the western boundary of the Site.

(ii) High levels of hazardous substances in soils largely at or near the surface, that may migrate;

Samples of suspected ACM showed concentrations as high as 80 percent chrysotile asbestos (see Attachment 2). The EPA's investigation indicates asbestos contamination has been present on the ground surface since demolition activities in the 1970s and migration of the contamination may have already occurred and will occur from weathering and human-caused activities such as foot traffic, vehicle traffic, and other disturbance of debris piles.

(iv) The (lack of) availability of other appropriate federal or state mechanisms to respond to the release;

No other local, state or federal agency is in the position, or has the resources, to independently implement an effective response action to address the on-going threats presented at the Site.

IV. ENDANGERMENT DETERMINATION

Actual or threatened releases of hazardous substances from this Site may present an imminent and substantial endangerment to public health, or welfare, or the environment.

V. PROPOSED ACTIONS AND ESTIMATED COSTS

A. Proposed Actions

1. Proposed action description

To mitigate the threat to the public health and welfare or the environment posed by the asbestos present at the Site, the removal action will involve the following:

• Excavation of contaminated soil using visual identification of suspected ACM. There were 46 grids measuring 50' by 50' each in the EPA's sampling event which showed the presence of asbestos. The total areal extent of these 46 grids would be 115,000 square feet, although only a portion of each grid has asbestos contamination on the ground surface. It is assumed at this time that a 12" deep excavation may be sufficient to remove

the surface contamination, for a potential total of 4,259 cubic yards of contaminated soil and debris in the 46 grids. The EPA anticipates that some grids will require a deeper excavation and others a shallower excavation to remove visually identified suspect ACM.

- Excavation of test pits in some of the known contaminated grids to determine if demolition debris was buried that could contain ACM. Buried material determined to be ACM will be excavated to the extent practicable, as determined by the EPA OSC. Any future discoveries and cleanup of buried asbestos will likely be regulated by the WYDEQ
- Transportation and disposal of waste. Waste containing asbestos will be transported and disposed as ACM at an approved landfill, in compliance with the off-site rule, 40 CFR 300.440.
- Property restoration, including placement of clean backfill and/or grading of existing site soils, as determined by the EPA OSC.
- Confirmation sampling. A sampling plan will be developed, including soil sampling and/or activity-based sampling to determine if the cleanup of visually identified materials resulted in no further threat to current persons accessing the property.

2. Contribution to remedial performance

This Site is not listed on the NPL. This Removal Action will be a final cleanup of visually identified ACM on the ground surface. No additional action will be required unless new contaminated areas are discovered in the future.

3. Engineering Evaluation/Cost Analysis (EE/CA)

This is a Time-Critical Removal Action; thus an EE/CA is not required.

4. Applicable or relevant and appropriate requirements (ARARs)

Removal actions conducted under CERCLA are required to attain ARARs to the extent practicable. In determining whether compliance with ARARs is practicable, EPA may consider appropriate factors including the urgency of the situation and the scope of the Removal Action to be conducted. A discussion of identified ARARs is included in Attachment 3.

5. Project Schedule

It is anticipated that the removal action will require approximately five weeks to complete and will be conducted during calendar year 2013.

B. Estimated Costs

CONTRACTOR COSTS

ERRS contractor \$ 1,080,000 START contractor 160,000

TOTAL REMOVAL ACTION PROJECT CEILING \$1,240,000

EPA direct and indirect costs, although cost recoverable, do not count towards the removal ceiling for this removal action. Liable parties may be held financially responsible for costs incurred by the EPA as set forth in Section 107 of CERCLA.

VI. EXPECTED CHANGE IN THE SITUATION SHOULD ACTION BE DELAYED OR NOT TAKEN

Delayed action will increase public health risks to the local population posed by asbestos fibers on the ground surface which may become airborne.

VII. OUTSTANDING POLICY ISSUES

Removals involving asbestos as a principal contaminant are one of seven categories designated as nationally significant or precedent-setting. Specific procedures are required for requesting Headquarters concurrence on these actions.

According to the EPA's Superfund Removal Guidance for Preparing Action Memoranda, September 2009, removals involving asbestos, when it is the principal contaminant of concern, require Headquarters concurrence because action levels for response have not yet been set and these determinations are being made on a case-by-case basis (OSWER 9345.4-05).

VIII. ENFORCEMENT

A separate Enforcement Addendum provides a confidential summary of current and potential future enforcement activities.

Using the extramural cost calculation from Section V (\$1,240,000), an estimate of EPA's direct intramural costs (\$28,000), and 35% as the regional indirect cost rate, the total estimated EPA costs for the removal would be:

$$(\$1,240,000 + \$28,000) + (35\% \times \$1,240,000) = \$1,702,000$$

The total EPA costs for this removal action based on full-cost accounting practices that will be eligible for cost recovery are estimated to be \$1,702,000.

Direct Costs include direct extramural costs and direct intramural costs. Indirect costs are calculated based on an estimated indirect cost rate expressed as a percentage of site-specific direct costs, consistent with the full cost accounting methodology effective October 2, 2000. These estimates do not include pre-judgment interest, do not take into account other enforcement costs, including Department of Justice costs, and may be adjusted during the course of a removal action. The estimates are for illustrative purposes only and their use is not intended to create any rights for responsible parties. Neither the lack of a total cost estimate nor deviation of actual total costs from this estimate will affect the United States' right to cost recovery.

X. RECOMMENDATION

This decision document represents the selected Removal Action for the Empire State Oil Company Refinery Site in Thermopolis, Hot Springs County, Wyoming, developed in accordance with CERCLA, as amended, and is not inconsistent with the NCP. This decision is based on the Administrative Record for the Site.

Conditions at the Site meet the NCP Section 300.415(b)(2) criteria for a Removal Action, and I recommend your approval of the proposed Removal Action. The total project ceiling will be \$1,240,000; this amount, if approved, will come from the Regional removal allowance.

Approve:	David A. Ostrander, Director Emergency Response & Prepar	Date: 8	2(13
Disapprove	:	Date:	

Emergency Response & Preparedness Program

Attachments: Attachment 1 - Map of Site

David A. Ostrander, Director

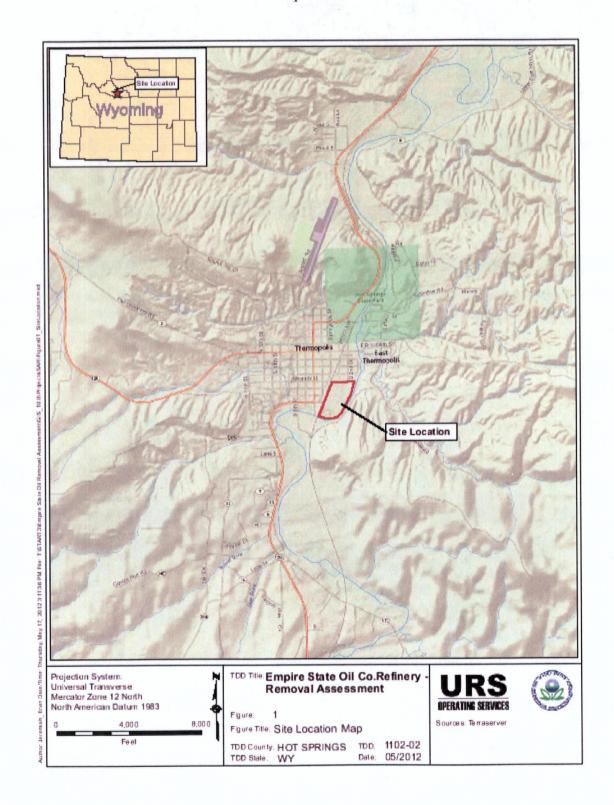
Attachment 2 - Results of asbestos sampling, figure and table

Attachment 3 - Applicable or Relevant and Appropriate Requirements

Attachment 4 – Photos of Site

Attachment 1

Map of Site



Attachment 2 Results of asbestos sampling: figure and table



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TABLE 3
As Destos Ground Survey Sample Description

Sample LD	Grid Cd1	Sample Date	Material Descriptino	Frishle?	Visual Estimate (%)	Mineral
EOACHSPLII	AC: U3X	4/26/2011	WHITE PLASTER Yes		ND	NYA
EOA JUISPILI	AJUUS	4/28/28(1)	MAG BLOCK PIPE INSULATION	MAG BLOCK PIPE INSULATION Yes		AMOSITE
EDAKULTIKU	AKIII 3	4/27/2011	BLACK FIBROUS TAR	Nu	ND	N/A
EDAKIII TÜK II	AKII13	4/27/2011	TANFIBROUS MATERIAL	No	65	CHRYSOTILE
ECAMBONTO	AMOBS	4/27/2011	WHITE THERMAL INSULATION	Yes	ND	N/A
EOANIII6CB11	ANIBI6	4/26/2011	SILVER TRANSITE CEMENT BOARD	Nu	3	CHRYSOTILE
EOANIU6CB11	ANUI6	4/26/2011	SILVER TRANSITE CEMENT BOARD	Nu	2	AMOSITE
EOANIU6CB11	ANU6	4/26/2011	SELVER PAINT	No	15	CHRYSOTLE
EOAN016PH1	ANUI 6	4/26/2011	WHITE PIPE INSULATION AEROCELL	Yes	40	CHRYSOTILE
EDANIH 6P12I	ANIII 6	4'26(20)11	WHITEPIPEINSULATION MAGELOCK	Yes	30	AMOSITE
EOAOIII9PH I	ADII19	4/26/2011	WHITEPPEINSULATION MAGBLOCK	Yes	7	CHRYSOTILE
EDAOURIPELL	ADIBI9	4/26/2011	WHITE PIPE INSULATION MAGELOCK	Yes	28	AMOSITE
EDADULUPILI	ADBIU	4/26/2011	WHITE PIPE INSULATION MAGBLOCK	Yes	5	CHRYSOTILE
EDADUIRPILI	ACOHU	4/36/2011	WHITEPIPEINSULATION MAGBLOCK	Yes	25	AMOSITE
EOAOH2TRII	AD012	4/26/2011	WHITE FIBERS IN TAR	No	ND	ŊΆ
ECACHI4TRII	ADIII 4	4/26/2011	WHITE FIBERS IN TAR (LAYER A)	Nü	MD	NA
EOAOH4TR11	ADIII 4	4/25/2011	WHITE FIBERS IN TAR (LAYER A)	Nu	15	CHRYSOTILE
EOAOH4TRII	ADUI 4	4/26/2011	WHITE FIBERS IN TAR (LAYER B)	No	TRACE	AMOSITE
EOA 0015P21	ADUI 5	4/26/2011	BROWNISH/GRAY PIPE INSULATION	Yes	18	AMOSITE
EOAOH 5P21	ACHI15	4/26/2011	BROWNISH/CRAY PIPEINSULATION	Yes	. TRACE	CHRYSOTILE

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TABLE 3, cont. Asbestos Ground Survey Sample Description

Sample ID	Grid Sample Cdl Date		Material Description	Frinkle Visual Estimate (%)		Mineral
EDADII SPILI	AOUI 5	4/26/2011	WHITE PIPE INSULATION AEROCELL Yes		22	CHRYSOTILE
EDADIH6PH I	AOM 6	4/26/2011	WHITE PIPE INSULATION AEROCELL	Yes	60	CHRYSOTILE
EDAD/IT/PILL	AOH7	4/36/2011	WHOTE PIPE INSULATION MAGELOCK	Yes	25	AMOSITE
EDADIH7P12I	AOII17	4/26/2011	WHITE PIPE INSULATION AEROCELL	Yes	60	CHRYSOTILE
EDAD018P01	KIBOA	4"25/2811	WHITE PIPE INSULATION AEROCELL	Yes	60	CHRYSOTILE
EDAD018Pt21	ADIII 8	4/26/2011	WHITE PIPE INSULATION AEROCELL	Yes	7	CHRYSOTILE
EDAD018Pt2t	AOHIX	4/26/2011	WHITE PIPE INSULATION AEROCELL	Yes	18	AMOSITE
EDADIII/GK II	AOH 9	4/26/2011	WHITEGASKET	Yes	70	CHRYSOTLE
EDAD019PH1	ADIII9	4/26/2011	WHITE PIPE INSULATION	Yes	60	CHRYSOTILE
EOAD019Pt2I	ADULA	4/26/2011	WHOTEPPEINSULATION	Yes	10	CHRYSOTILE
EDAD819PI2I	AOH 9	4726(2811	WHITEPPEINSULATION	Yes	20	AMOSTE
EOAO828PU I	ADIRII	4/26/2011	WHITE PIPE INSULATION	Yes	30	AMOSITE
EOAOU21PH1	ADID1	4720/2011	WHITE PEPEINSULATION	Yes	65	CHRYSOTLE
EOAOU23PH1	AD103	4/36/2011	AIR CELL PIPE INSULATION	Yes	60	CHRYSOTLE
EOAOII23TR11	AC 1023	472672011	BROWNFIBROUS MATERIAL	Nei	22	CHRYSOTLE
EOAO023TR11	AC ID3	4/26/2011	BLACK TAR	Nu	15	CHRYSOTLE
EOAOI34SH11	ADIB4	4/26/2011	ROOFING SHINGLE (FELT)	Nu	ND	N'A
EOAO034SH11	ADIB4	4/26/2011	ROOFING SHINGLE (TAR)	Nu	ND	N/A
EOAOI34SH11	AOIB4	4'26(2011)	ROOFING SHINGLE (SHINGLE)	Niu	ND	N'A
EOAQUIATITI	A()(1) 4	4/27/2811	WHITE THERMAL INSULATION	Yes	70	CHRYSOTILE
EOAS012MBIII I	AS012	4'26/2011	MAG BLOCK PIPE INSULATION	Yes	15	CROCIDOLITE

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TABLE 3, cont. Asbestos Ground Survey Sample Description

Sample ID	Grid Cdl	Sample Date	Material Description	Friable ACM?	Visual Estimate (%)	Mineral
EOATIII7TII I	ATOU7	4/27/2011	WHITE THERMAL INSULATION Yes NO		N/A	
EOATIEXSMILL	ATIIZN	4'26/2011	SURFACINGMUD	No	ND	N/A
EOALJUH4PH I	AUIII4	#28/2011	MAG BLOCK PIPE INSULATION	Yes	15	AMOSTE
EOAL/III04P112	ALHII4	4/28/2011	MAG BLOCK PIPE INSULATION	Yes	45	CHRYSOTILE
EDALJONAPH 2	AUIII4	4/28/(21)	MAG BLOCK PIPE INSULATION	Yes	5	AMOSTE
EDAL/III/SPILT	AUIIIS	4/27/2011	WHITEPIPEINSULATION MAG BLOCK	Yes	15	CHRYSOTILE
EOAL/IIIISPILI	AUII15	4/27/2011	WHITEPPEINSULATION MAG BLOCK	Yes	4	AMOSITE
EOAUIISPWII	ALJI315	4/27/2011	TAR WRAP	Nu	15	CHRYSOTILE
EOAV004P01	AVIII4	4/28/2011	MAG BLOCK PIPE INSULATION	Yes	40	CHRYSOTILE
EDAVIII4PII I	AVIII4	4/28/2011	MAG BLOCK PIPE INSULATION	Yes	3	AMONITE
EOAZIII9ACII21	AZII19	4/26/2011	AIR CELL PIPE INSULATION	Nis	ND	N'A
EOAZII19GMII11	AZH9	4/26/2011	GASKET MATERIAL	No	70	CHRYSOTILE
EOAZU2UMB 041	A20120	4/26/2011	MAG BLOCK PIPE INSULATION	Yes	7(1	AMOSITE
EOAZ020M9 041	A 201201	4/26/2011	BLACK FIBROUS TAR	Yes	15	CHRYSOTILE
EOBA021ACU11	ELAU21	4/26/2011	AIR CELL PIPE INSULATION	No	711	CHRYSOTILE
EOHAII21MHII31	BAIIZI	4/26/2011	MAGBLOCK PIPEINSULATION (TAN)	Yes	75	CHRYSOTILE
EOBAII21MB031	BAII21	472672011	MAGRICOR PIPEINSULATION (GRAY)	Yes	12	CHRYSOTILE
EOBAD21MB031	HAII21	4/26/2011	MAGIBLOCK PIPEINSULATION (GRAY)	Yes	4	AMOSTE
EDBAID1RFIDI	BAIIZI	4/26/2011	ROOFINGFELT	No	80	CHRYSOTILE
EOBB020CB011	88020	4/3/6/2011	CLOTHBELT	No	70	CHRYSOTILE
E088020C8021	88020	4/26/2011	CLOTHBELT	No	65	CHRYSOTLE

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TABLE 3, cont. Asbestos Ground Survey Sample Description

Sample ID	Geld Cd l	Sample Date	Material Description	Frishte ACMT	Visual Estimate (%)	Mineral
EOBBUZUENUII	88020	4/26/2011	PINK INSULATION	Yes	ĥ	CHRYSOTILE
EOBB02058011	88020	4/26/2011	PINK INSULATION	Yes	ù	AMOSTE
EOBBII2IIMBII2I	9B020	4126/2011	MAG BLOCK	Yés	70	AMOSITE
EOB BOZITSOLI	88020	4/26/2011	TRANSITE SIDING	Nia	15	CHRYSOTILE
EDBBU21RFU21	88021	4/26/2011	ROOFING FELT	No	70	CHRYSOTLE
EDBBUZIRFU31	88021	4/26/2011	ROOFING FELT	Nie	70	CHRYSOTILE
EDBB021SB011	88021	4/26/2011	TRANSITE SIDENG	No	ND	N/A
EDBC020RF011	BC020	4/26/2011	ROOFING FELT	Na	70	CHRYSOTLE
EOBDIT9MB051	BD019	4/36/2011	MAG BLOCK PIPE INSULATION	Yes	7#	AMOSITE
E080019911	BD(II)	4/28/2011	MAG BLOCK PIPE INSULATION	Yes	71)	AMOSITE
E080019Pf21	BDIII 9	4728(2011)	AIR CELL PIPE INSULATION	Yes	80	CHRYSOTLE
E08001921	BD019	472872011	AIR CELL PIPE INSULATION	Yès	TRACE	AMOSITE
E080019PB1	BD(III4	4728/2011	MAGRILOCK PIPE INSLLATION WHITE	Yes	15	CHRYSOTLE
EDBDIII 9PW II	BD019	472872011	MAG BLOCK PIPE INSULATION	Yes	ND	N/A
EOB EDZIPITI	BE020	4728/2011	MAG BLOCK PIPE INSULATION	Yes	12	AMOSITE
EOBE021PW11	BEU21	4/28/2011	TAR WIRE PIPE WRAP	Na	15	CHRYSOTILE

NA Strapplicable

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Attachment 3 - Applicable or Relevant and Appropriate Requirements

This table contains a listing of potential federal ARARs for the Empire State Oil Company Refinery Site.

Standard, Requirement, Criteria or Limitation	Citation	Description	Applicable <u>or</u> Relevant and Appropriate	Comments
FEDERAL				
Endangered Species Act of 1973	16 USC Section 1531; 40 CFR Subpart C, Section 6.302(h); and 50 CFR Part 402	Requires federal agencies to ensure that actions they fund, authorize or carry out are not likely to jeopardize the continued existence of any listed species or result in the destruction or adverse modification of designated critical habitat.	Applicable	No endangered species have been identified.
National Emissions Standards for Hazardous Air Pollutants (NESHAP), National Emission Standards for Asbestos	40 CFR Part 61 Subpart M	Addresses demolition and disposal of asbestos contaminated materials.	Applicable	Best Management Practices will be implemented to generally comply with the requirements of NESHAP and protect public health

Attachment 4 – Photos of Site









